

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

I. APPLICANT:

Company:

ExxonMobil Refining and Supply Company
P.O. Box 551
Baton Rouge, Louisiana 70821

Facility:

Coker Complex
4045 Scenic Highway, Baton Rouge, East Baton Rouge Parish, Louisiana
Approximate UTM coordinates are 675.736 kilometers East and 3374.700 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

ExxonMobil Refining and Supply Company (ExxonMobil) owns and operates a petroleum refinery in Baton Rouge, Louisiana (BRRF). The Coker Complex is an existing facility in the refinery. Previously the facility operated under Permit 2234-V0 dated November 30, 1999, Permit 2234-V1 dated February 18, 2004, and Permit 2234-V2 dated October 6, 2005. Currently the facility operates under Permit No. 2234-V3 dated April 11, 2006.

This permit incorporates sources for the Baton Rouge Coke Terminal, which currently operates under State Permit 0840-00085-02 dated July 6, 2007. Additionally, this permit serves as a renewal/modification for the Coke Complex.

Several Part 70 permits addressing portions of the facility have already been issued. These include:

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

Permit #	Units or Sources	Date Issued
2385-V3	Catalytic Cracking Complex	02/17/2007
2589-V3	Light Ends	04/11/2006
2176-V3	Low Sulfur Gasoline	04/11/2006
2275-V2	Pipestill Complex	10/10/2005
2447-V1	Hydroprocessing	05/18/2006
2296-V2	Light Oils	08/06/2007
2261-V1	Reformer	02/02/2007
2341-V1	Specialties Complex	08/29/2007
2047-V1	Docks	04/11/2006
2363-V1	Water Clarification Unit (WCLA)	01/25/2007
2795-V3	Refinery Tank Farm	01/11/2007
2696-V0	Complex Labs	08/31/2005
2300-V0	Sulfur Plant	03/20/2006
3060-V0	Hydrofining Unit	01/18/2008

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

ExxonMobil submitted an application and Emission Inventory Questionnaire (EIQ) received November 28, 2007 requesting a Part 70 permit modification.

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 2008; and in the <local paper>, <local town>, on <date>, 2008. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>, 2008. The draft permit was also submitted to US EPA Region VI on <date>, 2008. All comments will be considered prior to the final permit decision.

Project description

The Coker Complex consists of three interconnected facilities (West, East, and Far East) that use a delayed coking process to thermally crack feedstocks into coke, jet/diesel, and light ends. The Coker Complex processes heavy residual feedstocks from the Pipestills Complex and other sources. The process uses several furnaces, a fractionation tower, and several coke drums.

The Coke Terminal receives petroleum coke into the facility by railcar from the ExxonMobil Refinery. The railcars are moved into a covered area and emptied from the

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

bottom into a concrete lined pit. A conveyor moves the coke from the pit to the covered crusher where the oversized pieces are crushed. From the crusher, the conveyor takes the coke to the barge to be loaded or, when a barge is not available, to a storage pad to be held in piles. When a barge becomes available, a front-end loader moves the coke from the piles to a hopper. The hopper feeds a conveyor that transfers the coke to the main conveyor where it is transferred to the barge. Product is also loaded by truck for transport to customers.

BRRF proposes to process an additional product, wet fines, through the coke terminal. This proposal will result in additional emissions of trace compounds present in the wet fines.

BRRF intends to initially load wet fines using existing facilities. Some facility changes may be made to more efficiently load the product. These facilities potentially include a concrete pad for handling the wet fines, and/or a conveyor system and mixing hopper to mix wet fines with the other coke product handled by the facility.

Other changes to the permit include:

- The addition of the coke terminal sources to the Part 70 Title V permit.
- The addition of a previously grandfathered, permanently installed diesel-fired pump used for emergency response.
- The addition of a grandfathered source, Tank 570.

The addition of a specific condition for furnace F-501B as required by the EPA Consent Decree.

Permitted Air Emissions

Estimated emissions from the facility in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	58.58	58.93	+0.35
SO ₂	91.00	92.35	+1.35
NO _x	155.21	159.86	+4.65
CO	226.50	288.31	+61.81
VOC	183.80	186.29	+2.49

Prevention of Significant Deterioration Applicability

The project increases will not exceed PSD or NNSR thresholds. Therefore, PSD and NNSR do not apply.

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

MACT requirements

The facility meets MACT requirement by complying with the Louisiana Refinery MACT Determination through the Louisiana Fugitive Emission Consolidation program for the project fugitives. The proposed project will comply with the appropriate MACT requirements.

Air Modeling Analysis

There are no increases in Louisiana Toxic Air Pollutant emissions above the Minimum Emission Rate associated with this Part 70 permit renewal/modification. Air modeling analysis is not required.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

IV. Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms conditions and standards are provided in the Facility Specific Requirements Section of the draft permit.

Prevention of Significant Deterioration (PSD) – Part 52

There are no projects included in this permit that will trigger the PSD regulation.

Non-Attainment New Source Review (NNSR) – Part 52

There are no projects included in this permit that will trigger the NNSR regulation.

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

New Source Performance Standards (NSPS) – Part 60

Subpart J: Standards of Performance for Petroleum Refineries

Currently CKRFE/F501A and CKRFE/501B are subject to NSPS Subpart J. The remaining furnaces will be subject to NSPS Subpart J by December 31, 2008 per the EPA Consent Decree.

Subpart GGG: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries

Fugitive emissions are subject to NSPS Subpart GGG. The control requirements of Subpart GGG are met for all fugitive sources in the Coker Complex via compliance with the Louisiana Refinery MACT Determination.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories – Part 63

Subpart CC: Petroleum Refineries (Refinery MACT I)

Fugitive emissions are subject to NESHAP Subpart CC and the refinery complies via the Louisiana Refinery MACT Determination. All secondary wastewater streams at the Coker Complex are Group 2 and are not regulated by Subpart CC.

Compliance Assurance Monitoring (CAM) – Part 64

Emission units at the Coker Complex are not equipped with an add-on control device to achieve compliance with an emission limitation or standard. Therefore, CAM requirements are not applicable.

State Operating Permit Program (Title V) – Part 70

This permit is a renewal/modification permit and the application, submitted under the Louisiana Title V permitting program, contains all the elements as required under the Louisiana Title V regulations.

Control of Emissions of Nitrogen Oxides – Chapter 22

Coker furnaces meet the provisions of LAC 33:III.Chapter 22.

Comprehensive Toxic Air Pollutant Emission Control Program – Chapter 51

The toxic air pollutant emissions from fugitives, cooling towers and secondary wastewater must be controlled to a degree that constitutes MACT. The refinery complies with the Louisiana Refinery MACT Determination for fugitive emissions. Biweekly sampling for hydrocarbons is conducted at cooling towers. The secondary wastewater system complies with applicable provisions of NESHAP Subpart FF.

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

V. Permit Shields

A permit shield was not requested.

VI. Periodic Monitoring

No periodic monitoring is required.

VII. Applicability and Exemptions of Selected Subject Items

See Permit.

VIII. Streamlined Requirements

Unit	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
COKER/FUG	LA Refinery MACT	5% VOTAP (class I and II)	LA Refinery MACT in the manner* agreed to be ExxonMobil in its approved Air Toxic Compliance Plan Approved April 18, 1996, per Source Notice and Agreement dated October 14, 1996.
	LAC 33:III.2122	10% VOC	
	40 CFR 63 Subpart CC - modified HON option	5% VOHAP	
	40 CFR 60 Subpart GGG	10% VOC	

*In lieu of the requirement to monitor connectors (that have been opened or had the seal broken) during the next scheduled monitoring period, connector tightness testing is currently performed prior to equipment startup. Tightness testing may consist of nitrogen pressure test, hydro testing, or high pressure steam. Tightness is verified by instrumentation or observation.

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) - A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

I. APPLICANT:

Company:

ExxonMobil Refining and Supply Company
P.O. Box 551
Baton Rouge, Louisiana 70821

Facility:

Coker Complex
4045 Scenic Highway, Baton Rouge, East Baton Rouge Parish, Louisiana
Approximate UTM coordinates are 675.736 kilometers East and 3374.700 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

ExxonMobil Refining and Supply Company (ExxonMobil) owns and operates a petroleum refinery in Baton Rouge, Louisiana (BRRF). The Coker Complex is an existing facility in the refinery. Previously the facility operated under Permit 2234-V0 dated November 30, 1999, Permit 2234-V1 dated February 18, 2004, and Permit 2234-V2 dated October 6, 2005. Currently the facility operates under Permit No. 2234-V3 dated April 11, 2006.

This permit incorporates sources for the Baton Rouge Coke Terminal, which currently operates under State Permit 0840-00085-02 dated July 6, 2007. Additionally, this permit serves as a renewal/modification for the Coke Complex.

Several Part 70 permits addressing portions of the facility have already been issued. These include:

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

Permit #	Units or Sources	Date Issued
2385-V3	Catalytic Cracking Complex	02/17/2007
2589-V3	Light Ends	04/11/2006
2176-V3	Low Sulfur Gasoline	04/11/2006
2275-V2	Pipestill Complex	10/10/2005
2447-V1	Hydroprocessing	05/18/2006
2296-V2	Light Oils	08/06/2007
2261-V1	Reformer	02/02/2007
2341-V1	Specialties Complex	08/29/2007
2047-V1	Docks	04/11/2006
2363-V1	Water Clarification Unit (WCLA)	01/25/2007
2795-V3	Refinery Tank Farm	01/11/2007
2696-V0	Complex Labs	08/31/2005
2300-V0	Sulfur Plant	03/20/2006
3060-V0	Hydrofining Unit	01/18/2008

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

ExxonMobil submitted an application and Emission Inventory Questionnaire (EIQ) received November 28, 2007 requesting a Part 70 permit modification.

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 2008; and in the <local paper>, <local town>, on <date>, 2008. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>, 2008. The draft permit was also submitted to US EPA Region VI on <date>, 2008. All comments will be considered prior to the final permit decision.

Project description

The Coker Complex consists of three interconnected facilities (West, East, and Far East) that use a delayed coking process to thermally crack feedstocks into coke, jet/diesel, and light ends. The Coker Complex processes heavy residual feedstocks from the Pipestills Complex and other sources. The process uses several furnaces, a fractionation tower, and several coke drums.

The Coke Terminal receives petroleum coke into the facility by railcar from the ExxonMobil Refinery. The railcars are moved into a covered area and emptied from the

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

bottom into a concrete lined pit. A conveyor moves the coke from the pit to the covered crusher where the oversized pieces are crushed. From the crusher, the conveyor takes the coke to the barge to be loaded or, when a barge is not available, to a storage pad to be held in piles. When a barge becomes available, a front-end loader moves the coke from the piles to a hopper. The hopper feeds a conveyor that transfers the coke to the main conveyor where it is transferred to the barge. Product is also loaded by truck for transport to customers.

BRRF proposes to process an additional product, wet fines, through the coke terminal. This proposal will result in additional emissions of trace compounds present in the wet fines.

BRRF intends to initially load wet fines using existing facilities. Some facility changes may be made to more efficiently load the product. These facilities potentially include a concrete pad for handling the wet fines, and/or a conveyor system and mixing hopper to mix wet fines with the other coke product handled by the facility.

Other changes to the permit include:

- The addition of the coke terminal sources to the Part 70 Title V permit.
- The addition of a previously grandfathered, permanently installed diesel-fired pump used for emergency response.
- The addition of a grandfathered source, Tank 570.

The addition of a specific condition for furnace F-501B as required by the EPA Consent Decree.

Permitted Air Emissions

Estimated emissions from the facility in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	58.58	58.93	+0.35
SO ₂	91.00	92.35	+1.35
NO _x	155.21	159.86	+4.65
CO	226.50	288.31	+61.81
VOC	183.80	186.29	+2.49

Prevention of Significant Deterioration Applicability

The project increases will not exceed PSD or NNSR thresholds. Therefore, PSD and NNSR do not apply.

**Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4**

MACT requirements

The facility meets MACT requirement by complying with the Louisiana Refinery MACT Determination through the Louisiana Fugitive Emission Consolidation program for the project fugitives. The proposed project will comply with the appropriate MACT requirements.

Air Modeling Analysis

There are no increases in Louisiana Toxic Air Pollutant emissions above the Minimum Emission Rate associated with this Part 70 permit renewal/modification. Air modeling analysis is not required.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

IV. Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms conditions and standards are provided in the Facility Specific Requirements Section of the draft permit.

Prevention of Significant Deterioration (PSD) – Part 52

There are no projects included in this permit that will trigger the PSD regulation.

Non-Attainment New Source Review (NNSR) – Part 52

There are no projects included in this permit that will trigger the NNSR regulation.

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

New Source Performance Standards (NSPS) – Part 60

Subpart J: Standards of Performance for Petroleum Refineries

Currently CKRFE/F501A and CKRFE/501B are subject to NSPS Subpart J. The remaining furnaces will be subject to NSPS Subpart J by December 31, 2008 per the EPA Consent Decree.

Subpart GGG: Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries

Fugitive emissions are subject to NSPS Subpart GGG. The control requirements of Subpart GGG are met for all fugitive sources in the Coker Complex via compliance with the Louisiana Refinery MACT Determination.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories – Part 63

Subpart CC: Petroleum Refineries (Refinery MACT I)

Fugitive emissions are subject to NESHAP Subpart CC and the refinery complies via the Louisiana Refinery MACT Determination. All secondary wastewater streams at the Coker Complex are Group 2 and are not regulated by Subpart CC.

Compliance Assurance Monitoring (CAM) – Part 64

Emission units at the Coker Complex are not equipped with an add-on control device to achieve compliance with an emission limitation or standard. Therefore, CAM requirements are not applicable.

State Operating Permit Program (Title V) – Part 70

This permit is a renewal/modification permit and the application, submitted under the Louisiana Title V permitting program, contains all the elements as required under the Louisiana Title V regulations.

Control of Emissions of Nitrogen Oxides – Chapter 22

Coker furnaces meet the provisions of LAC 33:III.Chapter 22.

Comprehensive Toxic Air Pollutant Emission Control Program – Chapter 51

The toxic air pollutant emissions from fugitives, cooling towers and secondary wastewater must be controlled to a degree that constitutes MACT. The refinery complies with the Louisiana Refinery MACT Determination for fugitive emissions. Biweekly sampling for hydrocarbons is conducted at cooling towers. The secondary wastewater system complies with applicable provisions of NESHAP Subpart FF.

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

V. Permit Shields

A permit shield was not requested.

VI. Periodic Monitoring

No periodic monitoring is required.

VII. Applicability and Exemptions of Selected Subject Items

See Permit.

VIII. Streamlined Requirements

Unit	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
COKER/FUG	LA Refinery MACT	5% VOTAP (class I and II)	LA Refinery MACT in the manner* agreed to be ExxonMobil in its approved Air Toxic Compliance Plan Approved April 18, 1996, per Source Notice and Agreement dated October 14, 1996.
	LAC 33:III.2122	10% VOC	
	40 CFR 63 Subpart CC - modified HON option	5% VOHAP	
	40 CFR 60 Subpart GGG	10% VOC	

*In lieu of the requirement to monitor connectors (that have been opened or had the seal broken) during the next scheduled monitoring period, connector tightness testing is currently performed prior to equipment startup. Tightness testing may consist of nitrogen pressure test, hydro testing, or high pressure steam. Tightness is verified by instrumentation or observation.

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Disulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

Coker Complex
ExxonMobil Refining and Supply Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 2638
Activity Number: PER20070018
Draft Permit 2234-V4

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.